



**Faculty of Animal Science & Export Agriculture
Uva Wellassa University of Sri Lanka**

**B.ASc. Degree Programme
Year I Semester I
End Semester Examination – December 2008/January 2009**

ANS 131-2 Principles of Genetics and Breeding - Essay (Section II)

Instructions

Answer all questions in Section II

No. of questions : Two (02)

No. of pages : One (01)

Time : One hour (01 hr)

Total marks allocated : 40%

Index No:

1.
 - a) "Deletions /deficiencies of chromosome segments will leads to Pseudo-dominance"
What is your opinion about this statement?
Agree/ Disagree?
Justify your answer
 - b) "Sometimes duplications of chromosome segments is useful"
What is your opinion about this statement?
Agree/ Disagree
Justify your answer
 - c) Giving examples explain how the **genetic drift** change the gene frequencies in a population (based on Bottle neck effect)
2.
 - a) In a population of 500 plants having three genotypes **TT- 232, Tt – 223 and tt - 45** respectively.
Calculate the allelic frequencies $f(A)$ and $f(a)$
 - b) Why breeding is important to improve Animal productivity
 - c) Write a short note on "Traditional Animal Breeding Scheme"

[End of Section II]